

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018918**Date Inspected:** 27-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. M. Manikandan was present during the time noted above for observations relative to the work being performed.

TOWER # BAY 10 (Lift 4 south)

This QA Inspector witnessed the final bolt tension verification on the grating support angle of lift 4 south tower. The torque wrench S/N was 1003153. The QA Inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance with the contract specifications. The bolt size designations were as follows:

M20 X 50 – DHGM 200009 – 367 NM

M22 X 55 – DHGM 220011 – 457 NM

M22 X 110 – DHGM 220067 – 500 NM

For additional information please reference the pictures below:

OBG # TRIAL ASSEMBLY YARD (12AE-12BE)

This QA Inspector along with QA inspector Mr. Manjunath S Math performed dimensional joint survey inspection on the U-rib to verify the offset using 1 meter straight edge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

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Segment 12AE to Segment 12BE – PP 112 to PP 113

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD (12AE-12BE)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 019 in the (4G) overhead position on edge panel I stiffener piece mark no. EP3004-001. The location was the complete joint penetration groove weld joining the I stiffeners of segment 12AE and 12BE at bike path side. The welder ID was 053871. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

OBG # TRIAL ASSEMBLY YARD (12AE-12BE)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 065 in the (4G) overhead position on edge panel I stiffener piece mark no. EP3001-001. The location was the complete joint penetration groove weld joining the I stiffeners of segment 12AE and 12BE at crossbeam side. The welder ID was 040320. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 066 in the (4G) overhead position on edge panel I stiffener piece mark no. EP3001-001. The location was the complete joint penetration groove weld joining the I stiffeners of segment 12AE and 12BE at crossbeam side. The welder ID was 040367. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

OBG # TRIAL ASSEMBLY YARD (12AW-12BW)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 001 in the (4G) overhead position on deck panel piece mark no. OBW12. The location was the transverse splice weld joining segment 12AW and 12BW at work point W2 to W5. The welder ID was 041713. The ZPMC CWI was identified as Li Yang. The welding was performed against welding repair report B-WR17901. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-4G (4F)-FCM-Repair-1.

OBG # TRIAL ASSEMBLY YARD (12AW)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 051 in the (2G) horizontal position on longitudinal shear plate piece mark no. SEG3004X. The location was the complete joint penetration groove weld joining the longitudinal shear plate with the bottom panel of segment 12AW at work point W3. The welder ID was 046704. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2212-Tc-U4b-FCM-1.

OBG # TRIAL ASSEMBLY YARD (12AW-12BW)

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The QA Inspector observed the welding operation per the SMAW process on weld joint no. 001 in the (4G) overhead position on bottom panel piece mark no. OBW12B. The location was the transverse splice weld joining segment 12AW and 12BW at work point W3 to W4. The welder ID was 040611. The ZPMC CWI was identified as Li Yang. The welding was performed against welding repair report B-CWR2126. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-4G (4F)-FCM-Repair-1.



Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Manikandan,Murugan	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer
